

REMARKS

Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hirayanagi, U.S. Patent No. 6,180,289.

To have a structure which ensures that a divisional mask included in a compensation mask realizes exposure to be used instead of a defective divisional mask included in a main mask, the electron beam exposure apparatus according to the present invention as claimed in claim 12 comprises:

“a storage device which stores the address of a defective first defined mask among said plurality of first defined masks and the address of a second defined mask having a pattern configuration to be used instead of said defective first defined mask” and

“a control device which controls the deflection of said electron beam in said first and second electron beam optical systems, said control device, when the address of said defective first defined mask is designated, replacing it with the address of said second defined mask having a pattern configuration to be used instead of said defective first defined mask”, [emphasis added].

Meanwhile, Hirayanagi discloses a mask comprising a first mask group G1 formed by a plurality of divisional masks G1 (1, 1) through G1 (m, n) and a second mask group G2 formed by a plurality of divisional masks G2 (1, 1) through G2 (m, n), (FIG. 8).


However, Hirayanagi fails to disclose that the second mask group G2 includes a divisional mask G2 (s, t) having a pattern arrangement which can be used instead of a defective divisional mask G1 (x, y) if any are included in the first mask group G1.

Further, according to Column 16, lines 19-22 of Hirayanagi, when there is a defective divisional mask G1 (x, y) in the first mask group G1, instead of substituting this with the divisional mask G2 (s, t) which is included in the second mask group G2, the group G1 is replaced with a new group G1' without a defective divisional mask.

Hirayanagi thus completely lacks the technical concept of substituting a defective divisional mask included in a main mask with a divisional mask included in a compensation mask which is already on a mask and accordingly performing exposure, but discloses a fundamentally different technique from the present invention.

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Respectfully submitted,


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